

## Hauck StarJet 520E Capacity & Performance Table Low Pressure Oil Firing

Burner Input	Spin Position (degrees)	BURNER AIR						BURNER FUEL								Flame Length		Flame Diameter	
		Air Valve Position	Body Pressure		Air Flow		Blower Amps	Fuel Valve Position	Fuel Inlet pressure		Fuel Flow		Firing Rate		(ft)	(m)	(ft)	(m)	
			(in.w.c.)	(mbar)	(cfm)	(m3/min)			(psig)	(bar)	(gpm)	(lpm)	(MMBTU/h)	(MW)					
Low Fire	0	1	0.1	0.2	1800	51.0	52.5	0	52	3.59	2.50	9.5	20.7	5.48	1	0.30	3	0.91	
	30	1	0.1	0.2	1852	52.4	53.5	0	52	3.59	2.50	9.5	20.7	5.48	1	0.30	3	0.91	
	60	1	0.1	0.2	1800	51.0	53.5	0	52	3.59	2.50	9.5	20.7	5.48	1	0.30	3	0.91	
25%	0	3	7.3	18.2	3781	107.1	66.2	2.25	50	3.45	2.9	11.1	24.2	6.40	2	0.61	2	0.61	
	30	3	7.3	18.2	3547	100.5	67.9	2.25	50	3.45	2.9	11.1	24.2	6.40	2	0.61	2	0.61	
	60	3	10.0	24.9	3493	98.9	67.7	2.25	50	3.45	2.9	11.1	24.2	6.40	1.5	0.46	3	0.91	
50%	0	5	20.0	49.8	4978	141.0	84.4	4	46	3.17	5.8	22.1	48.4	12.80	8	2.44	2	0.61	
	30	5	22.0	54.7	4978	141.0	85.0	4	46	3.17	5.8	22.1	48.4	12.80	5	1.52	3	0.91	
	60	5	27.0	67.2	4978	141.0	82.0	4	46	3.17	5.8	22.1	48.4	12.80	4	1.22	4	1.22	
75%	0	6	33.0	82.1	6327	179.2	95.0	5.5	42	2.90	8.8	33.2	72.6	19.20	18	5.49	2.5	0.76	
	30	6	35.0	87.1	6476	183.4	94.3	5.5	42	2.90	8.8	33.2	72.6	19.20	10	3.05	3	0.91	
	60	6	40.0	99.5	6476	183.4	90.0	5.5	42	2.90	8.8	33.2	72.6	19.20	8	2.44	4.5	1.37	
100%	0	10	53.0	131.9	6903	195.5	110.5	9	37	2.55	11.7	44.2	96.8	25.60	18	5.49	3	0.91	
	30	10	60.0	149.3	7562	214.2	107.8	9	37	2.55	11.7	44.2	96.8	25.60	12	3.66	4	1.22	
	60	10	60.0	149.3	7174	203.2	101.0	9	37	2.55	11.7	44.2	96.8	25.60	8	2.44	4	1.22	
Not Firing	0	10	60.0	149.3	8622	244.2	113.9												
	30	10	60.0	149.3	8622	244.2	113.6												
	60	10	60.0	149.3	7931	224.6	108.8												

Table Issue Date	July 2016
Test Date	September 2004
Ambient Temperature	84°F (29°C)
Barometric Pressure	29.6 in.Hg (752 mm Hg)
Blower Size	Hauck TBA 36-100
Blower 100% / 115%	119 / 137 FLA (Full Load Amp Draw)
Fuel Type	No.2 Oil with HHV = 138,000 BTU/USgal (Standard) / LHV = 10.3 kWh/liter (Metric), 0.87 S.G., and stoichiometric ratio of 1380:1
Fuel Valve	Hauck GL-1-29 / S-3-1610C
Sleeve Type	High Velocity

## Hauck StarJet 520E Capacity & Performance Table Natural Gas Firing

Burner Input	Spin Position (degrees)	BURNER AIR						BURNER FUEL						Flame Length		Flame Diameter		
		Air Valve Position	Body Pressure		Air Flow		Blower Amps	Fuel Valve Position	Fuel Inlet pressure		Orifice ΔP		Firing Rate					
			(in.w.c.)	(mbar)	(cfm)	(m3/min)			(psig)	(bar)	(in.w.c.)	(mbar)	(MMBTU/h)	(MW)	(ft)	(m)	(ft)	(m)
Low Fire	0	1	0.5	1.2	1807	51.2	52.7	1	4.0	0.28	0.03	0.1	6.6	1.75	2	0.61	2	0.61
	30	1	0.5	1.2	1807	51.2	52.0	1	4.0	0.28	0.03	0.1	6.6	1.75	2	0.61	2	0.61
	60	1	0.5	1.2	1753	49.6	52.5	1	4.0	0.28	0.03	0.1	6.6	1.75	2	0.61	2	0.61
25%	0	2.5	4.0	10.0	2665	75.5	59.8	2.5	4.0	0.28	0.4	1.5	24.2	6.40	14	4.27	2.5	0.76
	30	2.5	4.5	11.2	2737	77.5	60.5	2.5	4.0	0.28	0.4	1.5	24.4	6.45	13	3.96	3	0.91
	60	2.5	5.0	12.4	2840	80.4	60.9	2.5	4.0	0.28	0.4	1.5	24.2	6.40	12	3.66	4	1.22
50%	0	3.5	8.0	19.9	4226	119.7	72.6	4	4.0	0.28	1.9	7.2	48.4	12.80	18	5.49	4	1.22
	30	3.5	8.0	19.9	4040	114.4	72.8	4	4.0	0.28	1.9	7.2	48.4	12.80	16	4.88	4.5	1.37
	60	3.5	10.0	24.9	4226	119.7	73.3	4	4.0	0.28	1.9	7.2	48.4	12.80	15	4.57	5.5	1.68
75%	0	5.5	23.0	57.2	6197	175.5	95.4	5.5	3.75	0.26	4.6	17.4	72.6	19.20	21	6.40	3.75	1.14
	30	5.5	24.0	59.7	6197	175.5	94.6	5.5	3.75	0.26	4.6	17.4	72.6	19.20	18	5.49	3.75	1.14
	60	5.5	28.0	69.7	6040	171.1	93.3	5.5	3.75	0.26	4.6	17.4	72.6	19.20	16	4.88	3.75	1.14
100%	0	10	50.0	124.4	8314	235.5	117.9	10	2.75	0.19	8.2	31.0	96.8	25.60	22	6.71	2.75	0.84
	30	10	53.0	131.9	7839	222.0	116.5	10	2.75	0.19	8.2	31.0	96.8	25.60	19	5.79	2.75	0.84
	60	10	54.0	134.4	7715	218.5	110.2	10	2.75	0.19	8.2	31.0	96.8	25.60	17	5.18	2.75	0.84
Not Firing	0	10	48.0	119.4	8542	241.9	122.1											
	30	10	50.0	124.4	8598	243.5	120.7											
	60	10	54.0	134.4	7839	222.0	110.7											

Table Issue Date	July 2016
Test Date	September 2004
Ambient Temperature	88°F (31°C)
Barometric Pressure	29.6 in.Hg (752 mm Hg)
Blower Size	Hauck TBA 36-100
Blower 100% / 115%	119 / 137 FLA (Full Load Amp Draw)
Fuel Type	Natural Gas with HHV = 1,034 BTU/ft3 (Standard) / LHV = 10.21 kWh/nm3 (Metric), 0.59 S.G., and stoichiometric ratio of 9.74:1
Fuel Valve and Meter	4 inch butterfly valve / OMG260 with 4.8 inch Bore
Sleeve Type	Low Velocity



## Hauck StarJet 520E Capacity & Performance Table Liquid Propane Firing

Burner Input	Spin Position (degrees)	BURNER AIR						BURNER FUEL						Flame Length		Flame Diameter		
		Air Valve Position	Body Pressure		Air Flow		Blower Amps	Fuel Valve Position	Fuel Inlet pressure		Fuel Flow		Firing Rate					
			(in.w.c.)	(mbar)	(cfm)	(m3/min)			(psig)	(bar)	(gpm)	(lpm)	(MMBTU/h)	(MW)	(ft)	(m)	(ft)	(m)
Low Fire	0	1	0.1	0.2	1973	55.9	50.7	1	210	14.48	1.5	5.7	8.2	2.17	4	1.22	1.5	0.46
	30	1	0.1	0.2	1827	51.7	51.0	1	210	14.48	1.5	5.7	8.2	2.17	4	1.22	1.5	0.46
	60	1	0.1	0.2	1877	53.2	49.6	1	210	14.48	1.5	5.7	8.2	2.17	4	1.22	1.5	0.46
25%	0	2.5	1	2.5	2888	81.8	58.6	2	200	13.79	4.4	16.8	24.2	6.40	7	2.13	3	0.91
	30	2.5	1	2.5	2823	79.9	58.0	2	200	13.79	4.4	16.8	24.2	6.40	7	2.13	3.5	1.07
	60	2.5	1	2.5	2888	81.8	58.5	2	200	13.79	4.4	16.8	24.2	6.40	7	2.13	3.5	1.07
50%	0	3.5	8	19.9	4412	125.0	73.8	3.75	195	13.45	8.9	33.6	48.4	12.80	10	3.05	4	1.22
	30	3.5	8	19.9	4412	125.0	73.3	3.75	195	13.45	8.9	33.6	48.4	12.80	10	3.05	4	1.22
	60	3.5	10	24.9	4412	125.0	73.5	3.75	195	13.45	8.9	33.6	48.4	12.80	10	3.05	4.5	1.37
75%	0	5	19	47.3	5777	163.6	88.5	4.5	195	13.45	13.3	50.3	72.6	19.20	16	4.88	4.5	1.37
	30	5	19	47.3	5696	161.3	88.9	4.5	195	13.45	13.3	50.3	72.6	19.20	15	4.57	4.5	1.37
	60	5	21	52.2	5777	163.6	88.5	4.5	195	13.45	13.3	50.3	72.6	19.20	14	4.27	5	1.52
100%	0	10	60	149.3	8196	232.1	115.9	8	190	13.10	17.7	67.1	96.8	25.60	19	5.79	4	1.22
	30	10	60	149.3	8503	240.8	116.6	8	190	13.10	17.7	67.1	96.8	25.60	17	5.18	4.5	1.37
	60	10	60	149.3	7457	211.2	108.9	8	190	13.10	17.7	67.1	96.8	25.60	14	4.27	5.5	1.68
Not Firing	0	10	60	149.3	7997	226.5	117.2											
	30	10	60	149.3	7939	224.8	116.0											
	60	10	60	149.3	7821	221.5	112.5											

Table Issue Date	July 2016
Test Date	September 2004
Ambient Temperature	70°F (21°C)
Barometric Pressure	29.6 in.Hg (752 mm Hg)
Blower Size	Hauck TBA 36-100
Blower 100% / 115%	119 / 137 FLA (Full Load Amp Draw)
Fuel Type	Liquid Propane with HHV = 91,000 BTU/USgal (Standard) / LHV = 6.5 kWh/liter (Metric), 0.5 S.G., and stoichiometric ratio of 850:1
Fuel Valve	Hauck H-1/2-24
Sleeve Type	Low Velocity